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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/635,070	08/06/2003	Michael J. Czaplicki	1001-009C2	7212
25215	7590	06/01/2004		EXAMINER
DOBRUSIN & THENNISCH PC 401 S OLD WOODWARD AVE SUITE 311 BIRMINGHAM, MI 48009				JIMENEZ, MARC QUEMUEL
			ART UNIT	PAPER NUMBER
				3726

DATE MAILED: 06/01/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)
	10/635,070	CZAPLICKI ET AL.
	Examiner	Art Unit
	Marc Jimenez	3726

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on ____.
- 2a) This action is FINAL. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 20-40 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) Claim(s) ____ is/are allowed.
- 6) Claim(s) 20-40 is/are rejected.
- 7) Claim(s) ____ is/are objected to.
- 8) Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on 06 August 2003 is/are: a) accepted or b) objected to by the Examiner. Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. ____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)	4) <input type="checkbox"/> Interview Summary (PTO-413)
2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)	Paper No(s)/Mail Date. ____.
3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date <u>02112004</u> .	5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)
	6) <input type="checkbox"/> Other: ____.

DETAILED ACTION

Drawings

1. Figure 1 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.
2. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they do not include the following reference sign(s) mentioned in the description: "line 3-3" described on page 3, line 11. reference sign(s) 24 are not shown in fig. 4-5 as mentioned in the description. A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Information Disclosure Statement

3. The information disclosure statement filed 2/11/04 fails to comply with 37 CFR 1.98(a)(2), which requires a legible copy of each U.S. and foreign patent; each publication or that portion which caused it to be listed; and all other information or that portion which caused it to be listed. It has been placed in the application file, but the information referred to therein has not been considered. No copies of the references lined through in the attached PTO-1449 were submitted with the instant application. Note that the parent applications of the instant application were unavailable to the examiner during examination of this application.

Specification

4. The abstract of the disclosure is objected to because it should be drawn to the method claimed. Correction is required. See MPEP § 608.01(b).
5. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed (ie. the claimed method).
6. The disclosure is objected to because of the following informalities: in the first sentence of the specification, -- now U.S. Patent Number 6,641,208, -- should be inserted after "August 12, 2002".

Appropriate correction is required.

Claim Rejections - 35 USC § 112

7. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
8. **Claims 20-36** are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 20 recites "at least one opening" in line 6 which is unclear because the claim also recites "a first open end to a second open end" in lines 4-5. Because of the limitation "first open end to a second open end" it appears that the carrier has at least two openings. It is also unclear whether the limitation "at least one opening" refers to the first and second open ends of the carrier because these are openings.

Claim 31 recites “at least one opening” in line 6 which is unclear because the claim also recites “a first open end to a second open end” in lines 4-5. Because of the limitation “first open end to a second open end” it appears that the carrier has at least two openings. It is also unclear whether the limitation “at least one opening” refers to the first and second open ends of the carrier because these are openings.

Claim Rejections - 35 USC § 102

9. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

10. **Claims 20, 26, 29, and 30** are rejected under 35 U.S.C. 102(e) as being anticipated by Hopton et al. (6,199,940).

Hopton et al. teach a method of reinforcing an automobile structure, comprising: providing an elongated hollow automobile frame structure **48,12** having a closed profile, the automobile frame structure **48,12** defining a hollow center **18**, providing an elongated carrier **30** having a longitudinal axis extending from a first open end **28** to a second open end **10** wherein the carrier **30** includes: i) at least one opening (col. 4, line 66) extending therethrough, ii) a plurality of axially extending ribs **44** (fig. 2); and iii) a contoured exterior surface **20** having at least one sloping wall (The curved outer surface of the carrier is considered a “sloping wall”

because sections of the wall slope similar to a curved ski slope.) extending from adjacent the first open end **28** to the second open end **10**; and applying a reinforcing medium **34,36,38** to the carrier **30** for forming a sleeve wherein the reinforcing medium **34,36,38** is a heat activated expandable material (col. 2, lines 1-10) that extends along at least a portion of the length of the carrier **30**, inserting the sleeve **24** in the hollow center **18** of the hollow frame **48,12** structure such that there is a clearance (see fig. 2) between the sleeve **20** and the automobile frame structure **48,12**.

Regarding claim 26, note the offset portion **30**.

Regarding claim 29, the reinforcing medium **52** (fig. 4) has a relatively high glass transition temperature (the claims are not specific as to what material that the reinforcing medium is compared to “relatively”) and substantially covers an entire outer surface of the elongated carrier.

Regarding claim 30, a separate adhesive layer is disposed upon the reinforcing medium (col. 5, line 8).

Claim Rejections - 35 USC § 103

11. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

12. **Claims 21 and 23** are rejected under 35 U.S.C. 103(a) as being unpatentable over Hopton et al. in view of Tanabe (JP 58-87668).

Hopton et al. teach the invention cited with the exception of the carrier being asymmetrical about its longitudinal axis and the carrier including a notch that aligns with a portion of the frame structure.

Tanabe teaches a carrier 6,q asymmetrical about its longitudinal axis with the carrier 6,q including a notch (see notch at q) that aligns with a portion of the frame structure 2.

It would have been obvious to one of ordinary skill in the art, at the time of the invention, to have provided the invention of Hopton et al. with the carrier being asymmetrical about its longitudinal axis and the carrier including a notch that aligns with a portion of the frame structure, in light of the teachings of Tanabe, in order to provide a more reinforced attachment between the carrier and the frame structure.

13. **Claim 22** is rejected under 35 U.S.C. 103(a) as being unpatentable over Hopton et al.

Hopton et al. teach the invention cited with the exception of using a mini-applicator type extruder.

At the time of the invention, it would have been an obvious matter of design choice to a person of ordinary skill in the art, to have used a mini-applicator type extruder because applicant has not disclosed that mini-applicator type extruder provides an advantage, is used for a particular purpose, or solves a stated problem. One of ordinary skill in the art, furthermore, would have expected applicant's invention to perform equally well with either the applicator taught by Hopton et al. or the claimed mini-applicator type extruder because either applicators

perform the same function of coating a carrier equally well. Therefore, it would have been an obvious matter of design choice to modify Hopton et al. to obtain the invention as specified in claim 22.

14. **Claims 24, 25, and 27** are rejected under 35 U.S.C. 103(a) as being unpatentable over Hopton et al. in view of Kubo et al. (5,773,109).

Hopton et al. teach that the tubular carrier could be made of synthetic resin such as nylon which is considered a polymeric material. However, Hopton et al. do not specifically teach injection molding the polymeric material.

Kubo et al. teach injection molding a nylon or polymeric material (col. 32, lines 26-30).

It would have been obvious to one of ordinary skill in the art, at the time of the invention, to have provided the invention of Hopton et al. with injection molding the polymeric material, in light of the teachings of Kubo et al., in order to create an accurately shaped carrier having the desired contour.

Regarding claim 25, the nylon taught by Hopton et al. and Kubo et al. are considered sheet molding compounds or mineral reinforced polymer because nylon has minerals and nylon is molded into sheets. Also, it would have been obvious to one of ordinary skill in the art, at the time of the invention, to have selected the claimed material, since it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious design choice. *In re Leshin*, 125 USPQ 416. See also *Ballas Liquidating Co. v Allied industries of Kansas, Inc.* (DC Kans) 205 USPQ 331.

Regarding claim 27, Hopton et al. teach that the reinforcing medium is an epoxy-based polymer (col. 4, line 19) having foamable characteristics (col. 5, line 15).

15. **Claim 28** is rejected under 35 U.S.C. 103(a) as being unpatentable over Hopton et al. in view of Thoms (6,092,287).

Hopton et al. teach the invention cited with the exception of the carrier having a narrow section.

Thoms teaches a carrier having a narrow section **39**.

It would have been obvious to one of ordinary skill in the art, at the time of the invention, to have provided the invention of Hopton et al. with the carrier having a narrow section, in light of the teachings of Thoms, in order to fit the carrier in a frame having different cross-sectional shapes.

16. **Claim 37, 39, and 40** are rejected under 35 U.S.C. 103(a) as being unpatentable over Hopton et al. in view of Thoms.

Hopton et al. teach providing an elongated hollow structure **12, 48** that forms at least a portion of an automotive vehicle frame, the hollow structure **12,48** having one or more walls defining a hollow center **18**, providing an elongated carrier **20** which extends along a longitudinal axis between a first end **28** and a second end **10**, the carrier defines a contoured exterior surface **30** that is shaped to substantially correspond to the one or more walls of the hollow structure **12,48**, and the contoured exterior surface **20** includes at least one sloping wall, applying a reinforcing medium **34,36,38** to the carrier **20** wherein the reinforcing medium

34,36,38 extends along at least a portion of the carrier **20** in the direction of the longitudinal axis, and the reinforcing medium **34,36,38** is a sealing material that is applied to multiple surfaces of the carrier **20**, and inserting the carrier **20** in the hollow center **18** of the hollow frame structure **12,48**.

Hopton et al. teach the invention cited with the exception of an area of a cross-section taken perpendicular to the longitudinal axis adjacent the first end is substantially larger than an area of a cross-section taken perpendicular to the longitudinal axis at the second end.

Thoms teaches an area of a cross-section taken perpendicular to the longitudinal axis adjacent the first end **39** is substantially larger than an area of a cross-section taken perpendicular to the longitudinal axis at the second end **40**.

It would have been obvious to one of ordinary skill in the art, at the time of the invention, to have provided the invention of Hopton et al. with an area of a cross-section taken perpendicular to the longitudinal axis adjacent the first end is substantially larger than an area of a cross-section taken perpendicular to the longitudinal axis at the second end, in light of the teachings of Thoms, in order to fit the carrier in a frame having different cross-sectional shapes.

Regarding claim 39, Hopton et al. teach that the hollow structure **12,48** is a pillar structure of an automotive vehicle.

Regarding claim 40, Thoms teaches cross-sections, for example, between **34** and **39**, narrow from the first end to the second end.

Therefore, it would have been obvious to one of ordinary skill in the art, at the time of the

invention, to have provided the invention of Hopton et al. with cross sections that narrow from the first to second ends, in light of the teachings of Thoms, in order to fit the carrier in a frame having different cross-sectional shapes.

17. **Claim 38** is rejected under 35 U.S.C. 103(a) as being unpatentable over Hopton et al. in view of Thoms as applied to claim 37 above, and further in view of Tanabe.

Hopton et al./Thoms teach the invention cited with the exception of having a bracket extending from the exterior surface of the carrier.

Tanabe teaches a carrier **6,q** having a bracket **q** extending from an exterior surface of the carrier **6**.

It would have been obvious to one of ordinary skill in the art, at the time of the invention, to have provided the invention of Hopton et al./Thoms with a bracket extending from the exterior surface of the carrier, in light of the teachings of Tanabe, in order to provide a more reinforced attachment between the carrier and the frame structure.

Contact Information

18. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Marc Jimenez whose telephone number is (703) 306-5965. The examiner can normally be reached on Monday-Friday between 5:30 a.m.-2:00 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Peter Vo can be reached on (703) 308-1789. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Marc Jimenez
Patent Examiner
AU 3726

MJ
May 28, 2004